

PRECIPITATION

As has been the case during most of the months of the present year to date, precipitation was widely deficient and particularly so over the interior, eastern and most southern districts, where a general lack of rain has persisted for several months, and conditions approaching severe drought were existing in many localities, particularly in the Southeastern States, where locally it was the driest May of record.

On the other hand, the rainfall was generous for the season in Arizona, New Mexico, and generally over Colorado, Utah, and Wyoming, where the warm season rainfall began unusually early. There were also some decidedly heavy falls locally in southern Louisiana, eastern Texas, near the Black Hills region of South Dakota, and in the far Northwest.

SNOWFALL

Light snow fell in northern New England on the 8th and 9th, the depths reaching as much as 2 inches locally in Maine. There was also snow over the upper Michigan peninsula and adjacent areas of Wisconsin, amounting to as much as 5 inches in extreme northern portions. Elsewhere there was little or no snow save in the western mountains. In Colorado snow was fairly heavy in the

higher mountains, reaching a depth of 30 inches locally, and there were depths up to a foot or more at points in California. Otherwise the snowfall in the mountains was mainly light.

ICE IN THE GREAT LAKES

Owing to the continued cool weather over the Lake region the ice melted slowly, and due to westerly winds accumulated, as stated in April, to an unusual extent in the eastern end of Lake Erie. At Buffalo, N. Y., the conditions attending the opening of navigation were the worst ever known, and it was not until May 9 that navigation was finally opened, and this was accomplished only after laborious efforts on the part of the big steel freighters in breaking their way through the heavy ice fields.

RELATIVE HUMIDITY

The percentages of relative humidity were almost universally less than normally shown for May, only scattering stations reporting values above normal.

The deficiencies were particularly large over the eastern half of the country and moderately so over most western districts, though there was a moderate excess over portions of the far Southwest where rainy weather prevailed to a considerable extent.

SEVERE LOCAL HAIL AND WIND STORMS, MAY, 1926

The table herewith contains such data as have been received concerning severe local storms that occurred during the month. A more complete statement will appear in the Annual Report of the Chief of Bureau.

Place	Date	Time	Width of path, yards ¹	Loss of life	Value of property destroyed	Character of storm	Remarks	Authority
Beaver City, Nebr.	1		880		\$750	Hail	Damage principally to early gardens.	Official, U. S. Weather Bureau.
Howard County, Nebr. (northwest part of).	1	4:30 p. m.	3 mi.		500	do	Many early gardens ruined; windows broken. Path 20 miles.	Do.
Alva, Okla., and vicinity	2	do	8 mi.			Heavy hail	Severe damage to growing crops over path 16 miles long.	Do.
Custer County, Okla. (west part of).	2	7 p. m.	2,640		15,400	do	Crops injured.	Do.
Milwaukee, Wis., and vicinity.	2	P. m.			1,000	Thundersquall	Plate glass windows broken; signs, awnings and etc., damaged.	Do.
Minnehaha District, Clarke County, Wash.	4	10:30 a. m.	50		3,000	Tornadic wind	A number of small buildings razed, others damaged. Many fruit trees injured. Path 2 miles long.	Do.
Bend, Calif.	4	5:30 p. m.	2,640		8,000	Wind	Young turkeys and chickens killed; other property damage.	Do.
Red Bluff, Calif. (north and east of).	4	6-9 p. m.				Hail	About 600 sheep lost due to exposure from storm.	Do.
Antelope Valley, Tehama County, Calif.	4	7:15 p. m.	5 mi.		10,000	Hail and rain	Crops beaten, roads washed, 1,100 sheep drowned; damage to fruit not estimated.	Do.
Miami, Fla. (near)	5	P. m.				do	Several small buildings under construction blown down.	Do.
Grady County, Okla. (southeast part of).	6	do	4 mi.		4,000	Hail	Crops injured.	Do.
San Juan, P. R. (vicinity of)	6	8:19 p. m.		1		Thunderstorm and heavy hail.	Many paper-covered roofs damaged; trees and shrubs stripped, some broken or uprooted; a man killed by live wire.	Do.
Elgin, Tex.	7	A. m.	3,520		5,000	Hail	Crops and buildings damaged. Path 2 miles long.	Do.
Taylor, Tex.	7	do	5 mi.		30,000	do	Crops severely injured.	Do.
Okmulgee, Okla. (3 miles north of).	7	1:30 p. m.	880		100,000	Tornado	Considerable property damage; slight injury to crops; 23 persons injured.	Do.
Sutter County, Calif.	7	2:30 p. m.	3 mi.		250,000	Hail	Extensive damage to peaches.	Do.
Bokoshe, Okla. (2½ miles north of).	7	6 p. m.	880	3	56,400	Tornado and hail.	Crop damage about \$16,000; property considerable.	Do.
Shreveport, La. (25-50 miles south of).	7-8					Hail	Cotton and corn considerably damaged necessitating some replanting.	Do.
Boynton, Okla. (6 miles northeast of).	8	2:30 p. m.	100		6,500	Tornado	Some property damaged in oil field.	Do.
Cimarron and Texas Counties, Okla.	8	2-3 p. m.				Hail	Crops damaged.	Do.
Clarence, La. (near)	8	3 p. m.	440-1,760			do	Young crops severely injured.	Do.
Remus, Okla.	8	do			1,000	Wind	Character of damage not reported.	Do.
Garvin County, Okla. (southeast part of).	8	4 p. m.	4 mi.		100,000	Severe hail	Crop loss heavy; other damage about \$25,000.	Do.
Meade to Pratt County, Kans.	8	5-8 p. m.	2-8 mi.		350,000	do	Damage chiefly to wheat over path 85 miles long.	Do.
Dallas, Tex., and vicinity	8	6 p. m.	1-15 mi.		875,000	do	Public utilities companies suffer heavy losses; much damage to crops, buildings, and other property.	Do.
Strong City to Cotton Wood Falls, Kans.	8	7 p. m.	5-8 mi.		3,000	do	Path short; damage principally to window glass and automobile tons.	Do.

¹ "Mi." signifies miles instead of yards.

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks	Authority
Brownville, Nebr.	8	11 p. m.	3,520		15,000	Severe hail	Crops damaged over an area about 2 miles square.	Official, U. S. Weather Bureau.
Horatio, Ark.	9	2 a. m.	2-4 mi.		50,000	Heavy hail	Serious crop damage.	Do.
Piggott, Ark.	9	10:30 a. m.	3 mi.		5,000	do.	Crops injured; chickens killed.	Do.
Scotland, Ark.	9	12:30 p. m.	880-2,200			do.	Gardens and cotton will have to be replanted.	Do.
Charleston, Mo. (10 miles southwest of).	9	4 p. m.	1,760		60,000	Hail and thunderstorm.	Property and crop damage.	Do.
Kaufman, Tex.	9	8 p. m.			115,000	Heavy hail	Crop loss heavy; about \$15,000 damage to property.	Do.
Ballard, Carlisle, and McCracken Counties, Ky. (parts of).	9				60,000	Heavy hail and wind.	Considerable property damage.	Do.
New Castle (near) to Birmingham (near), Ala.	9				10,000	Severe hail	Buildings damaged.	Do.
Western Tennessee.	9				100,000	Severe hail and wind.	Buildings damaged; trees uprooted; strawberry and tomato as well as other crops severely injured.	Do.
Bulcher, Tex. (near)	10	5 a. m.				Tornado	Oil derrick wrecked; 1 person injured.	Do.
Terre Haute, Ind.	10	5-5:50 a. m.			2,000	Thunderstorm	Residence wrecked; telephones out of order.	Do.
Love County, Okla. (western part of).	10	6 a. m.	3,520		13,000	Heavy hail	Crops injured; minor property damage.	Do.
Central, S. C.	10	12 noon	6 mi.			Moderate hail	Damage on about 6,000 acres.	Do.
Camden, Ark.	10	1 p. m.			1,000	do.	Orchards injured.	Do.
Chestnut, La. (3 miles west of).	10	P. m.			100,000	Tornado	Seven homes demolished; 11 persons injured, 3 seriously.	Shreveport Journal (La.).
Georgia (central and northern parts).	10					Wind	Telephone and telegraph poles prostrated; shade and fruit trees blown down; small buildings and autos damaged.	Official, U. S. Weather Bureau.
Lincoln, Ill. (6 miles east of).	10				5,000	Thunder storm	Barn and contents burned; residence damaged.	Do.
Grayson, Panin, Lamar, Delta, Denton, and Smith Counties, Tex.	10				1,713,000	Heavy hail	Heavy crop and property damage; some damage by wind in Smith County; storms generally occurred in the morning and ranged from 3 to 10 miles wide to 30 miles long.	Do.
Montgomery and Albany, Ala.	10-11				1,000	Thunderstorm	Character of damage not reported.	Do.
Judsonia, Ark. (8 miles north of).	11	2:30 p. m.	3,520		75,000	Heavy hail	Damage confined principally to strawberry crop.	Do.
Evening Shade, Ark.	11	4 p. m.	880-1,760		1,000	do.	Gardens, corn, and cotton injured.	Do.
Greer County, Okla. (west part of).	11	4-6 p. m.	1-4 mi.			do.	Heavy crop loss; path 20 miles long.	Do.
Nida, Okla. (northwest of).	11	P. m.	1,760		35,000	do.	Chief damage to crops.	Do.
Aynor, S. C. (near)	11	do.			1,000	Small tornado	Farm buildings damaged; some forest trees uprooted.	Do.
Maury-Hickman county line, Tenn.	11	do.				Thunderstorm and hail.	Several large trees uprooted; a porch wrecked and a silo blown down.	Do.
Roane and Loudon Counties, Tenn.	11		3-4 mi.		150,000	Severe hail	Extensive damage to peach orchards; strawberry patch valued at \$8,000 more or less a total loss; other crops injured.	Do.
Chesterfield, S. C. (near)	11-12		6 mi.		50,000	do.	Young crops on about 6,000 acres damaged.	Do.
Butler County, Kans. (north part of).	13	2:30 p. m.	100		500	Tornado	Storm over sparsely settled rural section.	Do.
Barber County, Kans. (south part of).	15	6 p. m.	440		8,000	do.	Character of damage not reported.	Do.
Grubbs, Ark.	17	6 a. m.	2,640		2,000	Heavy hail and wind.	Corn and cotton beaten to ground; barn blown down, killing a horse.	Do.
Scotts Bluff County, Nebr. (west part of).	17	12:30-1 p. m.	3,520		3,500	Heavy hail	Alfalfa suffered considerably.	Do.
Brinkman, Okla.	17	1 p. m.	3,520		10,000	do.	Damage chiefly to crops over path 4 miles long.	Do.
Wauweta, Nebr.	17	4:15 p. m.	170		2,000	Wind	Roof of church moved; bus loaded with children turned over; no one injured.	Do.
Beeville, Tex.	17	5 p. m.	2,640		10,000	Hail	Crops and windows damaged; path 8 miles long.	Do.
Bangamon and Christian Counties, Ill.	18	3 p. m.		1	3,000	Wind	Some property damage; three persons injured.	Do.
Harvey, Ill.	18	5 p. m.	50-100			Small tornado	Two residences and a number of small buildings demolished; many roofs damaged; scores of trees shattered or uprooted; automobiles crushed; telephone and power line poles leveled over path 2 miles long.	Do.
Roger Mills County, Okla. (south part of).	18	6-7 p. m.				Hail	Considerable crop damage.	Do.
Evansville, Ind.	18	8:50 p. m.				Wind	Minor damage to trees, insecure signs, awnings, etc.; green fruit blown off.	Do.
Lexington, Ky. (near)	18		3,520		15,000	Heavy hail	Damage over path 6 miles long.	Do.
Maumee Valley, Ohio	18	P. m.				Wind	Damage chiefly to farm buildings, silos, etc.	Do.
Piqua, Ohio (near)	18	do.	440		10,000	Tornadoic wind	Property damage reported; also loss of 5 head of cattle by lightning.	Do.
Sparta, Ill. (5 miles west of)	18				3,000	Thunderstorm	Barn struck by lightning.	Do.
Wells County, Ind.	18	P. m.	8 mi.	1	20,000	Wind, rain, and hail.	General damage resulted.	Do.
Taylor, Knox, Haskell, and Clay Counties, Tex.	18	do.			86,000	Hail	Crops, buildings, gardens, and trees damaged.	Do.
Bluffton, Lafayette and Maury Counties, Ind.	18					Heavy hail	Considerable damage reported.	Do.
Argo, Ill. (2 miles west of)	18			1		Wind	Plane crashed, killing air-mail flyer.	Do.
Youngstown, Ohio.	19	1 a. m.				Hail	Windows damaged; early gardens injured.	Do.
Washington County, Md. (east-central part of).	19	3-4 p. m.	440-880		37,500	Heavy hail	Crops and fruit severely injured; gardens ruined; roofs damaged; auto tops pierced.	Do.
Plainview, Tex.	19	6 p. m.	4 mi.		15,000	do.	Crops and buildings damaged.	Do.
New Castle County, Del. (north part of).	19	7-8 p. m.	6 mi.		50,000	do.	Crops, greenhouses, auto tops, and roofs damaged.	Do.
Lafayette, Ind. (north of)	19		220-440		10,000	Tornadoic wind	Character of damage not reported.	Do.
Gretna, Nebr.	20		1,760		2,000	Hail	Fruit and gardens injured.	Do.
Springfield, Nebr.	21	6 p. m.	4 mi.		3,000	Hail and rain	Gardens ruined and many fruit trees injured; corn flooded.	Do.
Fort Sumner, N. Mex.	22				6,500	Hail	Extent of damage not reported.	Do.
Buchanan, Cerro Gordo, Floyd Iowa, Bremer, Jackson, Mitchell, Polk, and Worth Counties, Iowa.	24				14,800	Hail and wind	Damage principally by wind; only minor destruction by hail. Paths of storms ranged from 2 to 4 miles wide to 7 miles long.	Do.
Warren Township, Lucas County, Iowa.	26	6 p. m.	6 mi.		1,000	Wind	Buildings damaged; path 6 miles.	Do.
Wright Township, Wayne County, Iowa.	26	do.	do.		1,000	Hail and wind	do.	Do.
Plainview, N. Mex.	26					Wind	Much damage, character of which was not reported.	Do.
New Mexico (parts of east half).	26					Hail	Extent of damage not reported.	Do.

Place	Date	Time	Width of path, yards	Loss of life	Value of property destroyed	Character of storm	Remarks	Authority
Raymond, Nebr.....	27	3-6 p. m.				Hail and rain.....	Corn washed out; truck gardens and strawberries damaged by hail.	Official, U. S. Weather Bureau.
Newberry, S. C.....	27	11 p. m.			18,000	Thunderstorm.....	Damage by lightning to cotton and cotton-mill equipment.	Do.
Rogers Mesa and Paonia, Colo.	28	1 p. m.	300		15,000	Heavy hail.....	Cherries, apricots, and possibly apples damaged.	Do.
Sedgwick County, Kans. (north part of).	28	9 p. m.	1,760		100,000	Severe hail.....	Growing wheat damaged, path 16 miles long.	Do.
Fort Stockton, Tex.....	29	5 p. m.	3,520		110,000	do.....	Extensive property and crop damage over path 10 miles long.	Do.
Carroll County, Ill.....	29	6 p. m.			22,830	Hail.....	Storm covered three distinct areas. Residences and greenhouses damaged; cattle and hogs injured; crops beaten.	Do.
Keokuk, Iowa and north of.....	29	P. m.				Hail and wind.....	Wind damage in city to small light buildings; damage to grapes by hail.	Do.
Paonia, Colo.....	30	2 p. m.			1,000	Hail.....	Injured cherries, apricots, and apples.	Do.
Menifee County, Ky.....	30				14,000	Electrical.....	Store destroyed.	Do.
Sideview, Ky. (near).....	30			1		do.....	House wrecked.	Do.
Alex and Bradley, Okla.....	30		2,640		20,000	Hail.....	Chief damage to crops.	Do.
Do.....	31		3 mi.			do.....	Damage included in that of the 30th.	Do.
Terre Haute, Ind. (near).....	31	1:28 p. m.		2		Thunderstorm.....	Two persons, a horse, and a dog killed by lightning.	Do.
Uniontown, Ark.....	31	6 p. m.		1		Wind and electrical.....	Several small buildings destroyed.	Do.
Jefferson County, Okla. (central part of).	31	6-7 p. m.	4 mi.			Heavy hail.....	Considerable damage; no estimate obtainable; path 30 miles.	Do.
Dallas, Tex., and vicinity.....	31	9:20 p. m.				Thunderstorm.....	Wires damaged by lightning; other property by wind; 2 persons injured.	Do.
Marion County, Ind.....	31		220		50,000	Tornadoic wind.....	Considerable property damage.	Do.
Princetown, Ohio (near).....	31					Hail.....	All crops over narrow strip injured.	Do.

* Includes damage at the same places on the 31st.

551.515 (73) STORMS AND WEATHER WARNINGS

WASHINGTON FORECAST DISTRICT

Storm warnings were issued in connection with only two storms during the month. The first were displayed from Nantucket, Mass., to Eastport, Me., at 9:30 p. m. of the 8th, because of a storm of considerable intensity that advanced north-northeastward from the vicinity of Bermuda to latitude 40° N. and then north-northwestward to Nova Scotia and eastern Maine. The other warnings were ordered from Atlantic City, N. J., to Eastport, Me., in connection with a disturbance of moderate intensity that advanced northeastward along the coast during the 16th-17th. Several stations reported maximum wind velocities of from 34 to more than 40 m. p. h. from the northeast.

Small craft warnings were displayed on portions of the east Gulf coast on the 6th and 11th, and on parts of the Atlantic coast north of Cape Hatteras on the 3d and 23d.

Frost warnings, almost entirely for the area from Kentucky eastward and northeastward, were issued on the 3d, 4th, 9th, 11th, 15th, 20th, 22d, 23d, 24th, and 26th. No general frosts occurred over the areas for which frost was forecast.—*C. L. Mitchell.*

CHICAGO FORECAST DISTRICT

Marked contrasts in temperature took place throughout the forecast district during May, there being both warm and cool periods. The temperature, on the whole, averaged above normal, except over eastern upper Michigan and most of the lower Michigan peninsula. They averaged considerably above the seasonal normal in the Great Plains States, and the greatest excess was 7.8° in eastern South Dakota. Record-breaking maxima were registered at several stations on the Great Plains.

The rainfall throughout the district was below the monthly normal, except in a few small areas, and the deficiency in the Mississippi and lower Missouri valleys was considerable.

The principal features of the weather were the high temperature and the deficient precipitation in the western portion of the district. There was naturally less storm movement than usual.

The month opened with a disturbance of moderate intensity central over the Great Plains and a high pressure area in the North Pacific region. These areas moved eastward, so that by the morning of the 2d the disturbance had reached the Upper Lakes and the high pressure the Canadian Northwest. Storm warnings were ordered on this morning for the Upper Lakes and small craft warnings for the Lower Lakes; and frost warnings for the Northwestern States and thence eastward across the upper Mississippi Valley. Frost warnings were issued on the 3d for the Upper Lake region and adjoining sections. The storm warnings were only partly verified, but frosts occurred as predicted.

On the morning of the 10th a low of considerable intensity, which had moved eastward from the Great Plains, was centered in the Ohio Valley, with a cold HIGH beyond the northern Rockies. Frost warnings were issued from the 10th to the 14th for the Northwestern States and eastward across the Upper Lake Region and adjoining sections; and the ensuing frosts were more or less general.

On the 18th general thunderstorms occurred over middle districts, accompanying the passage of a depression apparently of moderate energy. In the afternoon of that day a small tornado passed through Harvey, Ill., 22 miles south of Chicago. There was no loss of life, but damage to property amounted to about \$200,000. Showers and thunderstorms were predicted for the area in which the tornado occurred.

On the 19th the above-mentioned depression had moved northeastward to the Central Lakes Region and increased considerably in energy. A high-pressure area accompanied by comparatively low temperature was central over the Great Plains. Frost warnings were issued on that day for the Upper Lakes Region and adjoining areas; and frosts were reported generally from that area on the following morning.

On the night of the 20th storm warnings were ordered for all upper lakes stations, and on the morning of the 21st for the lower lakes, as a storm approached from the west. Warnings were continued on the Lower Lakes on the 22d, as the storm passed away very slowly down the St. Lawrence Valley. The warnings were partly verified, chiefly on Lakes Michigan and Huron.